#### Attachment 1

#### Pre-Certification Test Activity Matrix EDC DAAC

Pre-Certification Test Activity Matrix is prepared for the EDC DAAC to examine the extent to which the SV tests and Acceptance Tests (A/Ts) meet the pre-requisite test activities. The matrix is based on the DAAC Operations Rehearsal Scenarios, the SV and A/Ts, which are traced to the scenarios by ECS, and include reference to EGS-DAAC External Interface and Certification System Level Tests..

The SV and A/Ts have been reviewed for applicability and completeness with reference to meeting the certification pre requisites. The test activity matrix will be updated as required, when the SV and ATs are updated and the operational procedures are completed by the DAAC. The test activity matrix will be used to identify the functions if any, where the SV and A/Ts fall short of verifying the scenarios so that appropriate actions can be taken by DAAC/EGSI&T to ensure that ICT and EGS tests verify these functions. This matrix will be used as a "check-off" list to track and evaluate the extent to which the prerequisite test activities required for execution of the joint DAAC - EGS I&T Science & Operations Certification Tests have been completed prior to the certification test period

#### **Preparation of Test Activity Matrix**

Operations Rehearsal Scenarios identified for EDC DAAC formed the basis for identifying the tests to be completed as part of pre-certification activities. The procedure for preparation of the Test Activity Matrix is:

- 1. Identify all Launch Critical Rehearsal Scenarios
- 2. For each scenario, obtain details of all SV and ATs and EGS ICT Tests which are identified by EGS and the DAACs as applicable to the scenario.
- 3. Identify the relevant EGS Certification tests for each scenario
- 4. Identify the relevant EGS ICT Interface tests for each scenario
- 5. For each Acceptance Test identified in step 2 above, review the scope, expected results, acceptance criteria, and provide comments for additions and changes as necessary.
- 6. Review the scope of all the SV and A/Ts traced to each scenario 'as a group' and specify if they completely test the scenario; if not identify the parts of the scenario not addressed by the SV and A/Ts.

The Test Activity Matrix. Prepared using the results of this analysis/review is presented in Attachment - 1

#### **Certification Test Activity Matrix Definition of the Columns.**

The Pre-Certification Test Activity Matrix is explained below. Each column is defined.

- 1. **Column 1 Scenario** This column contains the DAAC identified Launch Critical scenario ID number.
- 2. **Column 2 OPS Rehearsals Launch Critical Scenario** This column contains the title of the LC scenario and a abstract of what operations are performed in the scenario.
- 3. **Column 3 Pre-Certification Tests -**The SV/AT and EGS ICT tests that are identified in this column are those tests that need to be accomplished in order to satisfy Operations that the scenario

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is complete. These tests need to be successfully completed before the Certification tests are run. The tests are identified in this column by the ID number and a brief description of what the test is testing.

- 4. **Column 4 Status of Pre-Certification Tests** This column is to identify whether the test has been completed, when completed, and passed, failed, or not conducted.
- 5. Column 5 Comments on the Expected Results, Acceptance Criteria & Operation Procedures This column is to identify short comings of Column 3 for areas of the Launch Critical Scenario that the tests do not cover. This column also is to identify OPS Procedures which will cover the short comings of the tests. If there are no short comings this column will be blank.
- 6. **Column 6 NCR Status -** This column is to identify NCR written against the tests in Column 3 and what the status of the NCR.
- 7. **Column 7 EGS Information -** This column is split into two sub-columns, EGS Test and Test Data Status. The EGS Test Column identifies the EGS Certification Test(s) that will be run against the scenario, (i.e. E-EGS10). The other sub-column, Test Data Status, is to identify the status and/or provide comments on the availability of the test data that will be used in the EGS test.
- 8. Column 8 Operation Procedures Status This column identifies the status on writing new procedures and/or updating the Operation Procedures (from the 611 Document) which are needed to run the scenario. It is intended that a separate document will identify a list of the procedures and provide a status of each procedure. This column is a overall summary of the status of all the procedures against this scenario.

	OPS Rehearsals						EGS	Inform.	
Scenario	Launch Critical Scenario (Task/Activity/Operation)	Functionality	Pre-Certification Tests (SV/AT Tests & ICT Tests)	Status of Pre- Certificati on Tests	Comments on the Expected Results, Acceptance Criteria & Operation Procedures	NCR Status (#, Class, Status)	Relevant EGS Test	Test Data Status	Operation Procedures Status (% Complete)
E-LC-1	ETM+ L-7 LOR Ingest and Archive. This scenario exercises: 1) the ability of EDAAC ECS to receive data shipping notice, 2)Ingest inventory, and archive LPS LOR data/metadata; 3) ECS to acknowledge receipt of the data. the ability to combine Format 1 and Format 2 data.	<ul> <li>250 – Ingest of Landsat-7 LOR data.</li> <li>60 – System can support the LPS interface protocol.</li> <li>850 – Ingested data is catalogued and archived so that they can be located and retrieved for production and distribution</li> </ul>	Push - B090410.010\$E  This procedure verifies the capability of the EDC ECS DAAC to receive Data Availability Notices (DANs) from the LPS concerning the availability of Landsat L0R data. Additional verification is made to ensure the ability of the EDC ECS DAAC to ingest, validate, and archive the L0R data.		SV/AT:  OPS. PROC.:		E-ETE5 E-EGS5 E-EGS10 E-EGS11		
			E to E -B120650.10\$E  The LPS and IGS Data Ingest and Archiving test case verifies that the EDC DAAC ingests and archives Landsat 7 Level 0R data and associated metadata and browse data received from the LPS (Landsat-7 Processing System) as well as inventory metadata and browse data received from IGSs. The inputs to this test case include Landsat 7 Level 0R data and associated metadata and browse data provided by the LPS via Ebnet as well as inventory information and browse data provided via physical media by a Landsat 7 IGS.		SV/AT:  OPS. PROC.:				
			<b>E-ICT8</b> – Landsat Interface Test						
E-LC-2	User Registration This scenario exercises: 1) the use of ECS Client to register new users; 2) the use of the ECS Client to test privileges established for the new users; and 3) WEB base user login and authorization.	<ul> <li>930 – System supports the user registration process.</li> <li>940 – Operator can define and modify the user profile information.</li> <li>1480 – The system supports</li> </ul>	SV-TC0065 This test verifies the ability of the accountability Management Service to allow M&O staff to 1) modify, delete and receive user profile records, 2) receive and send requested user profile data to/from M&O and ECS applications, 3) create a new user		SV/AT:  OPS. PROC.:		E-ETE5 E-ETE9 E-ETE15 E-EGS5 E-EGS9 E-EGS15		

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Scenario	Launch Critical Scenario (Task/Activity/Operation)	Functionality	Pre-Certification Tests (SV/AT Tests & ICT Tests)	Status of Pre- Certificati on Tests	Comments on the Expected Results, Acceptance Criteria & Operation Procedures	NCR Status (#, Class, Status)	Relevant EGS Test	Test Data Status	Operation Procedures Status (% Complete)
		managing user accounts.  1500 – The system can monitor system access for security violations  1570 – User can register and access ESOD via the IOSDIS Home Page  1160 – The system has the capability to enable/disable guest user logins and con.	account for records added to the user profile database, and 4) provide the user with registration approval results when new ECS user accounts are requested.				E-EGS10 E-EGS11		
			Pull - B100110.010\$E  This test verifies that ECS is accessible to the users via network connection (TCP/IP or NSI) and direct connection (the client is installed on the user's workstation). Also, this test verifies the user registration process for a ECS client user, and the user profile modification. This test covers doing only very basic searches and the access to other Desktop services.		SV/AT: OPS. PROC.:				
			E-ICT8 – Landsat 7 Interface Test E-ICT9 – V0 Interoperability Test E-ICT12 – ASTERInterface Test						
E-LC-3	ETM+ LOR and ASTER L1a/L1b Data Query, Browse and Order. This scenario exercises: 1) using ECS Client from the Image Assessment System (IAS) console generate a hit list from a query; 2) browse LOR data/images/metadata;	<ul> <li>970 – The system can distribute data in response to a client order by electronic means.</li> <li>980 – The system can distribute data in response to subscription order via 8 mm tape.</li> </ul>	Pull - B100110.010\$E  This test verifies that ECS is accessible to the users via network connection (TCP/IP or NSI) and direct connection (the client is installed on the user's workstation). Also, this test verifies the user registration process for a ECS client user, and the user profile modification. This test covers doing only very basic		SV/AT: Verify browse capability.  OPS. PROC.:		E-ETE5 E-ETE9 E-EGS5 E-EGS9 E-EGS10 E-EGS11		

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	and 3) select items from the hit list to order.	1010 – A user can order any archived data to be delivered electronically via FTP.  1020 – A user can order any archived data to be delivered through mail via 8 mm tape.  1120 – An operator can submit subscriptions and standings orders on behalf of a user.  1170 – The system can control access to data and services based on user and group Ids.  1650 – Jest can support authenticated user access and guest user access. (Drop 5)  1650 – JEST can support concurrent processing of simultaneous user reqauests. (Drop 5)  1680 – JEST can support access to data dictionary for valids. (Drop 5)  1690 – Show the JEST (web) client can support user inventory search to single and multiple sites with core and product specific attributes; cancellation of inventory and browse search requests. (Drop 5)  1710 – JEST can support results manipulation (chunking,	searches and the access to other Desktop services.						

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		sorting). (Drop 5)  1720 – Show JEST can support Integrated browse access to single and multiple sites. (Drop 5)  1740 Show the JEST client can support product ordering (including ASTER on demand) from single and multiple sites for media and FTP delivery. (Drop 5)  1800 – User can logon to the Desktop.  1810 – User can invoke eacj ECS tool (User Registration Tool, Comment Survey Tool).  1840 – Show user can exercise Desktop functionality (including navigate directories (up, Home), manipulate windows (Open, Duplicate, Close), directories (Create, Copy, Delete, Undelete), applications (Open, Copy, Delete, Undelete), and refresh display)  1850 From the Desktop, show user can download, install, and invoke EOS and non-EOS services from the ESOD Advertisements. (Drop TBD							
I			Pull - B100130.040\$E  This test verifies the interoperability		SV/AT:				

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			between ECS and the Version 0 System. This test verifies that a Version 0 user can simultaneously access data from ECS and V0 DAACs  E-ICT8 – Landsat 7 Interface Test  E_ICT12 – ASTER Interface Test		OPS. PROC.:				
E-LC-4	Request Level Order Tracking (OPS Production Request Tracking) This scenario exercises the ability of EDAAC ECS to track order requests at a high level (granule level tracking is not LC during this time period).	960 Show that the system can distribute data in response to a subscription order electronically via FTP.  1760 Show JEST can support request-level order status (including order tracking).  (Drop 5)	SM - B080150.010\$E  Demonstrate that M&O interfaces, provided for EDC ECS DAAC subsystems are accessible and functioning and that these interfaces are sufficient to support planned operations and maintenance activities.		SV/AT:  OPS. PROC.:		E-ETE5 E-ETE9 E-ETE15 E-EGS5 E-EGS9 E-EGS10 E-EGS11		
			Pull - B100110.100\$E  This test verifies the ECS provides the user with the capability to view information pertaining to orderable data products and formulate a request for the selected data.		SV/AT: Pull - B100110.100\$E – The ability to change standing orders needs to be tested. OPS. PROC.:				
			E-ICT8 – Landsat 7 Interface Test E-ICT12 – ASTER Interface Test						
E-LC-5	ETM+ WRS Scene Sub- setting This scenario exercises: 1) EDAAC ECS subsetting of L-7 scenes into Worldwide Reference System (WRS) scenes; 2) distribution of WRS scene data	1740 Show the JEST client can support product ordering (including ASTER on demand) from single and multiple sites for media and FTP delivery.	Pull - B100110.100\$E  This test verifies the ECS provides the user with the capability to view information pertaining to orderable data products and formulate a request for the selected data.		SV/AT: B100110.100\$E – No verification is done to ensure that the data that was received is actually what was requested. This needs to be done.		E-ETE5 E-EGS5 E-EGS10 E-EGS11		

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	from subintervals; 3) the ability to combine Format 1 and Format 2 data.	(Drop 5)	E to E - B120650.030\$E  The ECS User Access to Landsat 7  Information and Products test case verifies that the ECS processes user requests for Landsat 7 products and information and distributes the products and information requested.		SV/AT: B120650.030\$E – Steps 150, 310, 470, and 620 state, "Copy files to home directory for verification," but no where thereafter is it verified that the data files received actuall contain the requested data. The AT verifies that the LOR Format 1 and Format 2 data are received in EDC. Review the scope and intent of "ability to combine Format 1 and Format 2 data" in the scenario and ensure that is covered by the AT.				
E-LC-6	Data Staging for FTP This scenario exercises: 1) EDAAC ECS data set-up for FTP pickup.	860 Show that data resulting from production are catalogued and archived so that they can be located and retrieved for production and distribution. 960 Show that the system can distribute data in response to a subscription order electronically via FTP. 1560 Show the system has the capability to garbage collect the pull distribution area after a user has pulled their files	SV - TS0830.1  This test demonstrates the ability for Data Server Subsystem to distribute data to a specified pull location. Upon an Ftp Pull destination request and after data retrieval from the archive, data is copied to a designated common system location so the user can copy (or "PULL" the data) to the user workspace. The user receives an e-mail message providing the necessary path and file naming information detailing retrieval of the data. Data is verified by comparing the		SV/AT:  OPS. PROC.:		E-ETE5 E-ETE9 E-ETE15 E-EGS5 E-EGS9 E-EGS10 E-EGS11		

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			file size of the data in the pull directory						
			to the file size of the data in the archive,						
			and by executing a diff command on the						
			two data files. There is a time limit set in						
			a configuration file in which data is						
			available in the "pull" area. After the						
			time limit has expired the data is deleted.						
			This data deletion is performed by the						
			staging monitor server. Nominally, the						
			time limit is set for 24 or 36 hours. The						
			designated time limit will be changed to						
			a shorter period of time to test the ability						
			of the staging monitor server to delete the						
			data files. Several distribution requests						
			are submitted. Appropriate messages of						
			the receipt of distribution requests are						
			received. Error conditions tested include						
			attempting to access and pull data						
			requested by another user and requesting						
			invalid data.						
			SV - TS0830.2		SV/AT:				
			This test demonstrates the ability to						
			"Push" data to a specified destination. An		OPS. PROC.:				
			electronic distribution request is		Urs. PRUC.:				
			submitted for data to be placed in a						
			directory outside the DAAC. The data is						
			copied to the user disk location specified						

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			in the request. User will receive e-mail stating that distribution is complete Data is verified by comparing the file size of the data in the pull directory to the files size of the data in the archive, and by executing the diff command on the two data files. Several distribution requests are submitted. The tests will "push" the data internally to ECS and externally. Operationally, the FTPPush capability will be used within ECS by the PDPS subsystem when acquiring data used in PGE processing. Error tests will include: attempting to send data to a non-existent directory, the user supplying an incorrect password, attempting to distribute data to a directory that is write inaccessible, and attempting to distribute non-existent data.						
E-LC-7	Ingest and Archive of IAS Data Calibration Data. This scenario exercises EDAAC ECS ability to ingest and archive data provided by IAS for time interval, i.e., calibration parameter files.	70 Show that the system can support the IAS interface protocols. 260 Show the system can ingest IAS calibration parameter files. 850 Show that ingested data are catalogued and archived so that they can be located and	Push - B090410.020\$E  This procedure verifies the capability of the EDC ECS DAAC to poll a specified directory for the Calibration Parameter Files (CPFs). Additional verification is made to ensure the ability of the EDC DAAC to ingest, validate, and archive the CPFs.		SV/AT: B090410.020\$E- To verify that data have been archived, it is not sufficient to simply look at logs and metadata. The actual data needs to be retrieved from the		E-ETE5 E-EGS5 E-EGS10 E-EGS11		

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		retrieved for production and distribution	E to E - B120650.020\$E  The ECS Interfaces with MOC and IAS test case verifies that the ECS provides the MOC with Landsat 7 metadata, provides the IAS with Level 0R data, and ingests and archives calibration information received from the IAS. The inputs to this test case include ECS tools/displays for requesting Landsat 7 information and products, Landsat 7 metadata and inventory information, and Level 0R products archived in the LPS and IGS Data Ingest and Archiving test case (Section 12.5.1.1).  E-ICT8 – Landsat 7 Interface Test		archive.  OPS. PROC.:  SV/AT:  30% complete 4/1/98  B120650.020\$E –  Following Step 890, there does not appear to be any verification that the scenes were successfully transferred.  OPS. PROC.:				
E-LC-8	Ingest and Archive of ASTER GDS L1a/1b Post Launch Checkout Data. This scenario exercises EDAAC ECS ability to ingest and archive ASTER data provided by GDS and the U.S. ASTER team during the post launch checkout.	240 – Show the system can ingest ASTER L1A and L1B data from D3 tape.  850 Show that ingested data are catalogued and archived so that they can be located and retrieved for production and distribution.  950Show the system supports the DAR user registration process and registration updates	Push - B090430.010\$E  The objective of this test is to verify the ability of the EDC ECS DAAC to ingest ASTER Level 1A and 1B data from the ASTER GDS. Verification is made to ensure that the ASTER higher level data is received, accounted for, validated, archived, and updated in the appropriate EDC ECS DAAC inventories.  E to E - B120330.020\$E  The ASTER DAR Data Ingest and Archiving test case verifies that the EDC ECS DAAC ingests and archives		SV/AT:Review the scope of the DAR test and include portions to send the DAR acquisition and to distribute the DAR file after processing and ingesting.  OPS. PROC.:  SV/AT:		E-ETE9 E-EGS9 E-EGS10 E-EGS11		

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Scenario	Launch Critical Scenario (Task/Activity/Operation)	Functionality	Pre-Certification Tests (SV/AT Tests & ICT Tests)	Status of Pre- Certificati on Tests	Comments on the Expected Results, Acceptance Criteria & Operation Procedures	NCR Status (#, Class, Status)	Relevant EGS Test	Test Data Status	Operation Procedures Status (% Complete)
E-LC-9	Full ASTER SSI&T This scenario exercises: 1) the delivery and use of science	1270 Show the system can support updates to algorithm	ASTER Level 1 data that includes the DAR observation, browse data, and associated metadata. This test case also verifies that the EDC ECS DAAC ingests and archives ancillary data.  E-ICT12 – ASTER Interface Test  SV - TS0860.6  The SSI&T Interface Test demonstrates		OPS. PROC.:  SV/AT:  1) NOAA ancillary data access:		E-ETE9 E-EGS9		
	algorithms/software; 2) delivery, inspection and infusion testing of ASTER PGEs and associated test data; 3) integration testing of ASTER V2 PGEs to include chaining for higher level products; 4) commissioning of the ASTER V2 PGEs into operations using actual ASTER data from EOS AM-1; and 5) support PGE changes and modifications to include testing, insertion and production monitoring; 6) NOAA ancillary data access; 7) DEM ingest.	packages.  1280 Show that during SSI&T the system can support registration of PGEs.  1290 Show that during SSI&T the system can support the archival of PGE.exe TAR files.  1300 Show that during SSI&T the system can demonstrate the SSAP GUI. 1310 Show that during SSI&T the system can update PDPS/SSI&T database GUI. 1320 Show that the system provides the following SSI&T Tools: prohibited function checker; PCF checker; binary file differences; HDF comparison tool; profiling.  1330 Show that the system provides the ability to configuration manage the received software.	the ability to insert, acquire, and update Data Algorithm Packages (DAP), Science Software Archive Packages (SSAP), Process Generation Executables (PGEEXE), DAP Ancillary Data, and SSAP updates.  A DAP is ingested via Ingest's HTML protocol. After successful validation, the DAP is inserted into the archive and its associated metadata into the inventory. When PDPS is notified of the insertion, the DAP is acquired, a PGE is 'checked out' and data are created and inserted into DSS. Data created at this time include an AP, which is stored in the inventory db only, and SSAP components and a PGEEXE, which are stored in the inventory db and the archive. An update can then be		Not covered by any SV/AT test  2) DEM ingest.     Not covered by any SV/AT test  OPS. PROC.:		E-EGS10 E-EGS11		

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		1340 Show that the system provides the ability to execute received software in a test mode.	performed, where a new AP is inserted into the inventory, new SSAP components are stored in the inventory and the archive, and then old SSAP components are updated. SSI&T uses the Science Data Server Metadata Update Request to update the SSAP components that already reside in the inventory. DAP Ancillary data (AST_ANC) is then inserted from the Processing subsystem into the inventory db and the archive.  Using the Data Server Request Driver, the DAP will be acquired via FtpPush and then 'untarred' to verify it contains the correct files according to what was used to create the DAP. It will also be verified that each SSAP component was correctly archived and can be tracked via the inventory db. All server messages are logged in the appropriate MSS Event Log.  The GUIs will be checked against a checklist provided by the Human Factors Engineering (HFE) Group. The problem reports from the GUI Center will also be used while inspecting the GUI.						
1			SV - TS0460		SV/AT:				

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			This test cases verifies that the Algorithm Integration and Test Tool (AITTL) provides the capabilities to subscribe to a Delivery Archive Package (DAP), receive a DAP from the Data Server, and request a DAP to be transferred from the Data Server to the SSI&T environment.  This test also verifies that the AITTL provides the operations staff, via a GUI, the capability to display a list of the Science Software Archive Packages (SSAPs) stored in the Science Data Server, and a list of the files for any specific SSAP in the Data Server. The AITTL will also provides the operations staff, via a GUI, the capability to display and edit the metadata for a specific SSAP. The operations staff will have the capability to store an SSAP to the Data Server.  This test also verifies that the operations staff can restrict update access to the Data Server. The operations staff, via a GUI, can add and delete SSAPs to/from the Data Server; and add, delete, or extract a copy of a file from the set of files comprising an SSAP. It will be possible to add an SSAP to the Data Server by manually issuing the		OPS. PROC.:				

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			commands or by using a script file which contains the input commands. The operations staff will have the capability to maintain additions and deletions of the SSAPs. This will be done by maintaining an update record in each SSAP. A record will be made of all the updates made						
			SV - TS0405		SV/AT:		_		
			This test verifies that the SSIT Manager						
			interface conforms to the guidelines in		OPS. PROC.:				
			version 5.1 of the ECS User Interface		<u>015.1 k0c</u>				
			Style Guide. This GUI will be checked						
			against a checklist provided by the						
			Human Factors Engineering (HFE)						
			Group. The problem reports from the						
			GUI Center will also be used while						
			inspecting the GUI.						
			This test also verifies that the SSIT						
			Manager provides access to various						
			COTS products: SPARCWorks,						
			MSWindows, GhostView, Netscape,						
			Acrobat, DDTS, Emacs, Xedit; to						
			various tools: FORCHECK, Prohibited						
			Function Checker, Process Control File						
			Checker, Prolog Extractor, ASCII						
			comparison, Binary comparison, HDF						
			(GUI) comparison, HDF (hdiff)						

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			comparison. SSIT will allow xterm						
			windows to be invoked from the GUI.						
			EOSView and IDL can also be invoked						
			from the SSIT Manager.The SSIT						
			Manager checklist will also be verified.						
			SV - TS0406		SV/AT:				
			This test verifies that a PGE can be						
			registered with the Planning and		OPS. PROC.:				
			Processing systems in the PDPS						
			database. Using ODL files and the SSIT						
			tools, several PGE's will be registered by						
			populating the pdps database. Metadata						
			parameters and values will be entered via						
			the ODL files that are processed. Several						
			PGE's will be registered using multiple						
			profile id's thus allowing multiple sets of						
			scheduling, I/O, performance and						
			resource utilization information. Error						
			checking will be performed by processing						
			PGE's using PGE ODL files and ESDT						
			ODL files that contain errors.						
			SV - TS0407		SV/AT:				
			This test verifies that the SSIT Database						
			Update GUI updates the PDPS database		OPS. PROC.:				
			with the performance information entered						
			by the operator. Each GUI function will						

	OPS Rehearsals						EGS	Inform.	
Scenario	Launch Critical Scenario (Task/Activity/Operation)	Functionality	Pre-Certification Tests (SV/AT Tests & ICT Tests)	Status of Pre- Certificati on Tests	Comments on the Expected Results, Acceptance Criteria & Operation Procedures	NCR Status (#, Class, Status)	Relevant EGS Test		Operation Procedures Status (% Complete)
			be tested/inspected for correctness. PGE profile information will be entered for a new PGE and modified for an existing PGE. The Runtime and ESDT information will be inspected.  The GUI will be inspected using inputs from the GUI Center Group and the ECS Human Factors Engineering Group (HFE). This GUI will be checked against a checklist provided by the Human Factors Engineering (HFE) Group. The problem reports from the GUI Center will also be used while inspecting the GUI.						
			SV - TS0461		SV/AT:				
			This test case verifies that the AITTL provides the capabilities to create Tar files, containing PGE binaries and scripts, with associated metadata, and store them to the Science Data Server. This test case also verifies the capabilities to insert Static data file into the Science Data Server archive.		OPS. PROC.:				
			SV - TS0464		SV/AT:				
			This test verifies the allocation of resources needed to execute a PGE. It						

	OPS Rehearsals						EGS	Inform.	
Scenario	Launch Critical Scenario (Task/Activity/Operation)	Functionality	Pre-Certification Tests (SV/AT Tests & ICT Tests)	Status of Pre- Certificati on Tests	Comments on the Expected Results, Acceptance Criteria & Operation Procedures	NCR Status (#, Class, Status)	Relevant EGS Test		Operation Procedures Status (% Complete)
			verifies that the computer hardware		OPS. PROC.:				
			resources needed are available to support						
			the execution of a PGE based on the						
			computer resource information						
			associated with the Data Processing						
			Request ID (DPR ID).						
			This test also verifies that the pre-						
			execution or the preparation of PGE						
			execution of the preparation of TGE execution creates a PCF and a UNIX						
			Profile. A PGE input file is created to						
			retain information that is needed to						
			execute the PGE. This test case will also						
			verifies the following items related to the						
			PCF and PGE Execution:						
			• the ability to create a						
			PCF which provides						
			information to the SDP						
			Toolkit CI about the						
			input data required to						
			execute a PGE and						
			output data generated						
			from the executing						
			PGE.						
			• the ability to create a						
			mapping of logical file						

	OPS Rehearsals						EGS	Inform.	
Scenario	Launch Critical Scenario (Task/Activity/Operation)	Functionality	Pre-Certification Tests (SV/AT Tests & ICT Tests)	Status of Pre- Certificati on Tests	Comments on the Expected Results, Acceptance Criteria & Operation Procedures	NCR Status (#, Class, Status)	Relevant EGS Test		Operation Procedures Status (% Complete)
			handles to physical file						
			handles in the PCF for						
			the input data required						
			to execute a PGE and						
			for the output data						
			produced by the PGE.						
			This test also verifies the execution job						
			and the initial processing and monitoring						
			of the execution of a PGE. Please note						
			that the allocation of resources, data						
			staging and preparation must be done						
			before executing a PGE. The execution						
			is invoked by a toolkit script to run the						
			actual PGE on the production machine.						
			This test also verifies the following items						
			relating to the status message files after						
			the execution of a PGE:						
			• the ability to create a						
			Status Message File to						
			be used by the SDP						
			Toolkit CI to collect						
			toolkit status and error						
			information about the						
			execution of a PGE						
			• the ability to create						

### Attachment 1

	OPS Rehearsals						EGS	Inform.	
Scenario	Launch Critical Scenario (Task/Activity/Operation)	Functionality	Pre-Certification Tests (SV/AT Tests & ICT Tests)	Status of Pre- Certificati on Tests	Comments on the Expected Results, Acceptance Criteria & Operation Procedures	NCR Status (#, Class, Status)	Relevant EGS Test	Test Data Status	Operation Procedures Status (% Complete)
			User Status Message Files to be used by the SDP Toolkit CI during PGE execution if requested through the data defining the characteristics of the PGE.  This test case also verifies that Execution Manager can provide metadata and an interface to processing-specific metadata for a generated data product.  Finally, this procedure verifies that PDPS maintains "running totals" for various processing statistics per PGE run. These totals are used when calculating the resources needed for the next run of the PGE  SV - TS0408  The data visualization tools provided from the SSIT Manager GUI are the COTS product Interactive Data Language (IDL), and the custom developed product EOSView. IDL		SV/AT:  OPS. PROC.:				
			provides the capability to interactively analyze and visualize data. EOSView,						

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	OPS Rehearsals						EGS	Inform.	
Scenario	Launch Critical Scenario (Task/Activity/Operation)	Functionality	Pre-Certification Tests (SV/AT Tests & ICT Tests)	Status of Pre- Certificati on Tests	Comments on the Expected Results, Acceptance Criteria & Operation Procedures	NCR Status (#, Class, Status)	Relevant EGS Test	Test Data Status	Operation Procedures Status (% Complete)
			the custom tool developed for the ECS						
			project provides the capability to						
			examine and verify HDF and HDF-EOS						
			data files. The combination of these						
			tools provide all data visualization						
			functionality required by the SSI&T						
			process.						
			This test verifies access to these tools						
			from the SSIT Manager GUI and the						
			data visualization capabilities as it relates						
			specifically to SSI&T activities. Only						
			EOSView capability that is required for						
			SSIT operations is addressed in this test						
			case Additional capability that is						
			required by EOSView in the Client						
			(CLS) subsystem can be found in the						
			Client Subsystem testcases.						
			Pull - B100250.010\$E This		SV/AT:				
			procedure tests the EDC DAAC's						
			Science Software Integration and Test		OPS. PROC.:				
			Team's (SSITT) ability to install, verify,						
			archive, and report on science software						
			ingested from the MODIS SCF. Next, it						
			verifies the user interfaces between the						
			ECS DAAC and the MODIS SCF						
			supports continued testing and						

	OPS Rehearsals						EGS	Inform.	
Scenario	Launch Critical Scenario (Task/Activity/Operation)	Functionality	Pre-Certification Tests (SV/AT Tests & ICT Tests)	Status of Pre- Certificati on Tests	Comments on the Expected Results, Acceptance Criteria & Operation Procedures	NCR Status (#, Class, Status)	Relevant EGS Test		Operation Procedures Status (% Complete)
			development of science algorithms.  Finally, this test verifies the MODIS  SCF's ability to search, retrieve, and check-out data and algorithms from the DAAC archive.						
			E-ICT1 – SCF Interface tests - EDAAC to ASTER SCF						
E-LC-10	Full MODIS SSI&T This scenario exercises: 1) the delivery and use of science algorithms/software; 2) delivery, inspection, and infusion testing of MODIS PGEs and associated test data; 3) integration testing of MODIS PGEs to include chaining for higher level products; 4) commissioning of the MODIS PGEs into operations using actual MODIS data from EOS AM-1; and 5) support PGE changes and modifications to include testing insertion, and production monitoring.	1270 Show the system can support updates to algorithm packages.  1280 Show that during SSI&T the system can support registration of PGEs.  1290 Show that during SSI&T the system can support the archival of PGE.exe TAR files.  1300 Show that during SSI&T the system can demonstrate the SSAP GUI.  1310 Show that during SSI&T the system can update PDPS/SSI&T database GUI.  1320 Show that the system provides the following SSI&T Tools: prohibited function checker; PCF checker; binary file differences; HDF comparison tool; profiling.	SV - TS0860.6 The SSI&T Interface Test demonstrates the abilityto insert, acquire, and update Data Algorithm Packages (DAP), Science Software Archive Packages (SSAP), Process Generation Executables (PGEEXE), DAP Ancillary Data, and SSAP updates.  A DAP is ingested via Ingest's HTML protocol. After successful validation, the DAP is inserted into the archive and its associated metadata into the inventory. When PDPS is notified of the insertion, the DAP is acquired, a PGE is 'checked out' and data are created and inserted into DSS. Data created at this time include an AP, which is stored in the inventory db only, and SSAP		SV/AT:  OPS. PROC.:		E-ETE15 E-EGS15 E-EGS10 E-EGS11		Science Operations

	OPS Rehearsals						EGS	Inform.	
Scenario	Launch Critical Scenario (Task/Activity/Operation)	Functionality	Pre-Certification Tests (SV/AT Tests & ICT Tests)	Status of Pre- Certificati on Tests	Comments on the Expected Results, Acceptance Criteria & Operation Procedures	NCR Status (#, Class, Status)	Relevant EGS Test		Operation Procedures Status (% Complete)
		1330 Show that the system provides the ability to configuration manage the received software.  1340 Show that the system provides the ability to execute received software in a test mode.	components and a PGEEXE, which are stored in the inventory db and the archive. An update can then be performed, where a new AP is inserted into the inventory, new SSAP components are stored in the inventory and the archive, and then old SSAP components are updated. SSI&T uses the Science Data Server Metadata Update Request to update the SSAP components that already reside in the inventory. DAP Ancillary data (AST_ANC) is then inserted from the Processing subsystem into the inventory db and the archive.  Using the Data Server Request Driver, the DAP will be acquired via FtpPush and then 'untarred' to verify it contains the correct files according to what was used to create the DAP. It will also be verified that each SSAP component was correctly archived and can be tracked via the inventory db. All server messages are logged in the appropriate MSS Event Log.  The GUIs will be checked against a checklist provided by the Human Factors						

	OPS Rehearsals						EGS	Inform.	
Scenario	Launch Critical Scenario (Task/Activity/Operation)	Functionality	Pre-Certification Tests (SV/AT Tests & ICT Tests)	Status of Pre- Certificati on Tests	Comments on the Expected Results, Acceptance Criteria & Operation Procedures	NCR Status (#, Class, Status)	Relevant EGS Test		Operation Procedures Status (% Complete)
			Engineering (HFE) Group. The problem reports from the GUI Center will also be used while inspecting the GUI.						
			SV - TS0460 This test cases		SV/AT:				
			verifies that the Algorithm Integration						
			and Test Tool (AITTL) provides the		OPS. PROC.:				
			capabilities to subscribe to a Delivery						
			Archive Package (DAP), receive a DAP						
			from the Data Server, and request a DAP						
			to be transferred from the Data Server to						
			the SSI&T environment.						
			This test also verifies that the AITTL						
			provides the operations staff, via a GUI,						
			the capability to display a list of the						
			Science Software Archive Packages						
			(SSAPs) stored in the Science Data						
			Server, and a list of the files for any						
			specific SSAP in the Data Server. The						
			AITTL will also provides the operations						
			staff, via a GUI, the capability to display						
			and edit the metadata for a specific						
			SSAP. The operations staff will have the						
			capability to store an SSAP to the Data						
			Server.						
			This test also verifies that the operations staff can restrict update access to the Data Server. The operations staff, via a GUI, can add and delete SSAPs to/from the Data Server; and add, delete, or						

OPS Rehearsals						EGS	Inform.	
	Functionality	Pre-Certification Tests (SV/AT Tests & ICT Tests)	Status of Pre- Certificati on Tests	Comments on the Expected Results, Acceptance Criteria & Operation Procedures	NCR Status (#, Class, Status)			Operation Procedures Status (% Complete)
		extract a copy of a file from the set of files comprising an SSAP. It will be possible to add an SSAP to the Data Server by manually issuing the commands or by using a script file which contains the input commands. The operations staff will have the capability to maintain additions and deletions of the SSAPs. This will be done by maintaining an update record in each SSAP. A record will be made of all the updates made  SV - TS0405 This test verifies that the SSIT Manager interface conforms to the guidelines in version 5.1 of the ECS		SV/AT:  OPS. PROC.:				
		will be checked against a checklist provided by the Human Factors Engineering (HFE) Group. The problem						
		used while inspecting the GUI.  This test also verifies that the SSIT Manager provides access to various COTS products: SPARCWorks, MSWindows, GhostView, Netscape, Acrobat, DDTS, Emacs, Xedit; to various tools: FORCHECK, Prohibited Function Checker, Process Control File Checker, Prolog Extractor, ASCII comparison, Binary comparison, HDF (GUI) comparison, HDF (hdiff) comparison. SSIT will allow xterm windows to be invoked from the GUI. EOSView and IDL can also be invoked						
	Launch Critical Scenario	OPS Rehearsals  Functionality  Launch Critical Scenario	Pre-Certification Tests (SV/AT Tests & ICT Tests)  extract a copy of a file from the set of files comprising an SSAP. It will be possible to add an SSAP to the Data Server by manually issuing the commands or by using a script file which contains the input commands. The operations staff will be the capability to maintain additions and deletions of the SSAPs. This will be done by maintaining an update record in each SSAP. A record will be made of all the updates made  SV - TS0405 This test verifies that the SSIT Manager interface conforms to the guidelines in version 5.1 of the ECS User Interface Style Guide. This GUI will be checked against a checklist provided by the Human Factors Engineering (HFE) Group. The problem reports from the GUI Center will also be used while inspecting the GUI.  This test also verifies that the SSIT Manager provides access to various COTS products: SPARCWorks, MSWindows, GhostView, Netscape, Acrobat, DDTS, Emacs, Xedit; to various tools: FORCHECK, Probibited Function Checker, Process Control File Checker, Prolog Extractor, ASCII comparison, Birl will allow xetern windows to be invoked to the GUI.	Launch Critical Scenario (Task/Activity/Operation)  Extract a copy of a file from the set of files comprising an SSAP. It will be possible to add an SSAP to the Data Server by maintain additions and deletions of the SSAPs. This will be done and the capability to maintain additions and deletions of the SSAPs. This will be done by maintaining an update record in each SSAP. This will be done by maintaining an update record in each SSAP. This will be done by maintaining an update record in each SSAP. A record will be made of all the updates made  SV - TS0405 This test verifies that the SSIT Manager interface conforms to the guidelines in version 5.1 of the ECS User Interface Style Guide. This GUI will be checked against a checklist provided by the Human Factors Engineering (HFE) Group. The problem reports from the GUI Center will also be used while inspecting the GUI.  This test also verifies that the SSIT Manager provides access to various COTS products: SPARCWorks, MSWindows, Ghost/iew, Netscape, Acrobat, DDTS, Ennacs, NGCHECK, Prohibited Function Checker, Process Control File Checker, Prolog Extractor, ASCII comparison, Binary comparison, HDF (GUI) co	Functionality  Pre-Certification Tests (SVAT Tests & ICT Tests)  extract a copy of a file from the set of files comprising an SSAP. It will be possible to add an SSAP to the Data Server by manually issuing the commands or by using a script file which contains the input commands. The operations staff will have the capability to maintain additions and deletions of the SSAPs. This will be made of all the updates made  SV - TS0405 This test verifies that the SSIT Manager interface conforms to the guidelines in version 5.1 of the ECS User Interface Style Guide. This GUI will be checked against a checklist provided by the Human Factors Engineering (HFE) Group. The problem reports from the GUI Center will also be used while inspecting the GUI.  This test also verifies that the SSIT Manager provides access to various COTS products: SPARCWorks, MSWindows, Ghostylew, Netscape, Acrobad, DDTS, Emass, Nedit to various tools is FORCHECK, Problibited Function Checker, Process Control File Checker, Prologe Estractor, ASCII comparison, Binary comparison, Binary comparison, Binary comparison, Bild allow xterm windows to be invoked from the GUI.	Functionality  Functionality  Pre-Certification Tests (SV/AT Tests & ICT Tests)  Status of Pre-Certification Tests (SV/AT Tests & ICT Tests)  Status of Pre-Certification Tests (SV/AT Tests & ICT Tests)  Status of Pre-Certification Tests  Operation Acceptance Criteria & Operation Procedures  Status Status Acceptance Criteria & Operation Procedures  Status Status Status Operation Procedures  Status Status Status Operation Procedures  Status Status Status Operation Procedures  Operation Procedure	Pre-Certification Tests (SVAT Tests & ICT Tests)	Pre-Certification Tests (SVAT Tests & ICT Tests)  Equation (Task/Activity/Operation)  Functionality  Pre-Certification Tests (SVAT Tests & ICT Tests)  Pre-Certification Tests (Pre-Certification Tests (Pre-Certification Tests)  Pre-Certification Tests (Pre-Certification Tests)  Pre-Certification Tests (Pre-Certification Tests (Pre-Certification Tests)  Pre-Certification

	OPS Rehearsals						EGS	Inform.	
Scenario	Launch Critical Scenario (Task/Activity/Operation)	Functionality	Pre-Certification Tests (SV/AT Tests & ICT Tests)	Status of Pre- Certificati on Tests	Comments on the Expected Results, Acceptance Criteria & Operation Procedures	NCR Status (#, Class, Status)	Relevant EGS Test		Operation Procedures Status (% Complete)
			SV - TS0406 This test verifies that a PGE can be registered with the Planning and Processing systems in the PDPS database. Using ODL files and the SSIT tools, several PGE's will be registered by populating the pdps database. Metadata parameters and values will be entered via the ODL files that are processed. Several PGE's will be registered using multiple profile id's thus allowing multiple sets of scheduling, I/O performance and resource utilization information. Error checking will be performed by processing PGE's using PGE ODL files and ESDT ODL files that contain errors		SV/AT:  OPS. PROC.:				
			SV - TS0407 This test verifies that		SV/AT:				
			the SSIT Database Update GUI updates						
			the PDPS database with the performance		OPS. PROC.:				
			information entered by the operator.						
			Each GUI function will be						
			tested/inspected for correctness. PGE						
			profile information will be entered for a						
			new PGE and modified for an existing						
			PGE. The Runtime and ESDT						
			information will be inspected.  The GUI will be inspected using inputs from the GUI Center Group and the ECS Human Factors Engineering Group (HFE). This GUI will be checked against a checklist provided by the Human Factors Engineering (HFE) Group. The problem reports from the GUI Center will also be used while inspecting the GUI.						

	OPS Rehearsals						EGS	Inform.	
Scenario	Launch Critical Scenario (Task/Activity/Operation)	Functionality	Pre-Certification Tests (SV/AT Tests & ICT Tests)	Status of Pre- Certificati on Tests	Comments on the Expected Results, Acceptance Criteria & Operation Procedures	NCR Status (#, Class, Status)	Relevant EGS Test	Test Data Status	Operation Procedures Status (% Complete)
			SV - TS0461 This test case verifies that the AITTL provides the capabilities to create Tar files, containing PGE binaries and scripts, with associated metadata, and store them to the Science Data Server. This test case also verifies the capabilities to insert Static data file into the Science Data Server archive		SV/AT:  OPS. PROC.:				
			SV - TS0464 This test verifies the		SV/AT:				
			allocation of resources needed to execute						
			a PGE. It verifies that the computer		OPS. PROC.:				
			hardware resources needed are available						
			to support the execution of a PGE based on the computer resource information						
			associated with the Data Processing						
			Request ID (DPR ID). This test also						
			verifies that the pre-execution or the						
			preparation of PGE execution creates a						
			PCF and a UNIX Profile. A PGE input						
			file is created to retain information that is						
			needed to execute the PGE. This test						
			case will also verifies the following items						
			related to the PCF and PGE Execution:						
			• the ability to create a						
			PCF which provides						
			information to the SDP						
			Toolkit CI about the						
			input data required to						
			execute a PGE and						

Attachme	OPS Rehearsals						EGS	Inform.	
Scenario	Launch Critical Scenario (Task/Activity/Operation)	Functionality	Pre-Certification Tests (SV/AT Tests & ICT Tests)	Status of Pre- Certificati on Tests	Comments on the Expected Results, Acceptance Criteria & Operation Procedures	NCR Status (#, Class, Status)	Relevant EGS Test		Operation Procedures Status (% Complete)
			output data generated						
			from the executing						
			PGE.						
			• the ability to create a						
			mapping of logical file						
			handles to physical file						
			handles in the PCF for						
			the input data required						
			to execute a PGE and						
			for the output data						
			produced by the PGE.						
			This test also verifies the execution job						
			and the initial processing and monitoring						
			of the execution of a PGE. Please note						
			that the allocation of resources, data						
			staging and preparation must be done						
			before executing a PGE. The execution						
			is invoked by a toolkit script to run the						
			actual PGE on the production machine.						
			This test also verifies the following items						
			relating to the status message files after						
			the execution of a PGE:						
			• the ability to create a						
			Status Message File to						
			be used by the SDP						

### Attachment 1

	OPS Rehearsals						EGS	Inform.	
Scenario	Launch Critical Scenario (Task/Activity/Operation)	Functionality	Pre-Certification Tests (SV/AT Tests & ICT Tests)	Status of Pre- Certificati on Tests	Comments on the Expected Results, Acceptance Criteria & Operation Procedures	NCR Status (#, Class, Status)	Relevant EGS Test		Operation Procedures Status (% Complete)
			Toolkit CI to collect						
			toolkit status and error						
			information about the						
			execution of a PGE						
			• the ability to create						
			User Status Message						
			Files to be used by the						
			SDP Toolkit CI during						
			PGE execution if						
			requested through the						
			data defining the						
			characteristics of the						
			PGE.						
			This test case also verifies that Execution						
			Manager can provide metadata and an						
			interface to processing-specific metadata						
			for a generated data product.						
			Finally, this procedure verifies that PDPS maintains "running totals" for various processing statistics per PGE run. These totals are used when calculating the resources needed for the next run of the PGE						
			SV - TS0408 The data		SV/AT:				
			visualization tools provided from the						
			SSIT Manager GUI are the COTS		OPS. PROC.:				
			product Interactive Data Language						

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	OPS Rehearsals						EGS	Inform.	
Scenario	Launch Critical Scenario (Task/Activity/Operation)	Functionality	Pre-Certification Tests (SV/AT Tests & ICT Tests)	Status of Pre- Certificati on Tests	Comments on the Expected Results, Acceptance Criteria & Operation Procedures	NCR Status (#, Class, Status)	Relevant EGS Test	Test Data Status	Operation Procedures Status (% Complete)
			(IDL), and the custom developed product EOSView. IDL provides the capability to interactively analyze and visualize data. EOSView, the custom tool developed for the ECS project provides the capability to examine and verify HDF and HDF-EOS data files. The combination of these tools provide all data visualization functionality required by the SSI&T process.  This test verifies access to these tools from the SSIT Manager GUI and the data visualization capabilities as it relates specifically to SSI&T activities. Only EOSView capability that is required for SSIT operations is addressed in this test case Additional capability that is required by EOSView in the Client (CLS) subsystem can be found in the Client Subsystem test cases  Pull - B100250.010\$E This procedure tests the EDC DAAC's Science Software Integration and Test Team's (SSITT) ability to install, verify, archive, and report on science software ingested from the MODIS SCF. Next, it verifies the user interfaces between the ECS DAAC and the MODIS SCF supports continued testing and development of science algorithms. Finally, this test verifies the MODIS SCF's ability to search, retrieve, and check-out data and algorithms from the DAAC archive.  E-ICT1 – SCF Interface Tests		SV/AT:  OPS. PROC.:				

### **Attachment 1**

	OPS Rehearsals						EGS	Inform.	
Scenario	Launch Critical Scenario (Task/Activity/Operation)	Functionality	Pre-Certification Tests (SV/AT Tests & ICT Tests)	Status of Pre- Certificati on Tests	Comments on the Expected Results, Acceptance Criteria & Operation Procedures	NCR Status (#, Class, Status)	Relevant EGS Test		Operation Procedures Status (% Complete)
			- EDAAC to MODIS SCF						
E-LC-11	System Administration This scenario exercises: 1) the ability to manage the DCE cell for the EDAAC ECS including the exercise of add, delete, and edit capabilities; 2) management of UNIX user accounts; and 3) other system management, system network, and system administrative capabilities; 4) monitor of error logs integrated fashion.	930 Show that the system supports the user registration process. 940 Show that an operator can define and modify the user profile information. 1480Show that the system supports managing user accounts. 30 Show support of 2-way e-mail communication with ASTER GDS. 880 Show that the system can support archive backups and can access the backup copy when the primary copy is inaccessible. 1470 Show that the operator can monitor and manage the DCE infrastructure. 870 Show the system has the ability to identify lost files on damaged tapes and recover undamaged files. (Drop 5)	SM - B080110.010\$E This test verifies the existence and accessibility of documented operational and maintenance policies and procedures.		SV/AT:  1. No test for DCE cell management. Tests include only DCE server up & down, and log in.  2. User account management and security covered in tests.  3. Tests include some system management and administrative capability, e.g. ftp/ip, mail, print and backup/restore; but does not include capabilities like event log, network file systems, add/remove disk drive, etc.  4. Tests cover error log.  OPS. PROC.:		E-ETE5 E-ETE9 E-ETE15 E-EGS5 E-EGS9 E-EGS10 E-EGS11		System Management
			SM - B080110.020\$E This test		SV/AT:				

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	OPS Rehearsals						EGS	Inform.	
Scenario	Launch Critical Scenario (Task/Activity/Operation)	Functionality	Pre-Certification Tests (SV/AT Tests & ICT Tests)	Status of Pre- Certificati on Tests	Comments on the Expected Results, Acceptance Criteria & Operation Procedures	NCR Status (#, Class, Status)	Relevant EGS Test		Operation Procedures Status (% Complete)
			verifies that the ECS hardware and software configuration items are on the system.		OPS. PROC.:				
			SM - B080120.010\$E The purpose of this test is to demonstrate a normal startup, operations and hutdown of the ECS site. This test also demonstrates the ability of the ECS to perform a warm restart and demonstrates that configuration inputs from the prior operational state are still active following a shutdownand restart process.		SV/AT:  OPS. PROC.:				
			SM - B080130.020\$E This test verifies the ability of the LSM to start up and shut down managed applications. Application event recording and alert generation are also verified, along with the capability to monitor the status of managed applications.		SV/AT: OPS. PROC.:				
			SM - B080130.020\$E This test verifies the ability of the LSM to start up and shut down managed applications. Application event recording and alert generation are also verified, along with the capability to monitor the status of managed applications.		SV/AT: OPS. PROC.:				
			SM - B080140.010\$E This confirms that the site's standard procedures contain methodology for responding to catastrophic situations that require immediate site shutdown and for other types of abnormal shutdown such as system critical equipment failure. The test also verifies that the ECS site can recover from an emergency shutdown.		SV/AT:  OPS. PROC.:				
			SM - B080140.010\$E This confirms that the site's standard procedures contain methodology for responding to catastrophic situations that		SV/AT:				

	OPS Rehearsals						EGS	Inform.	
Scenario	Launch Critical Scenario (Task/Activity/Operation)	Functionality	Pre-Certification Tests (SV/AT Tests & ICT Tests)	Status of Pre- Certificati on Tests	Comments on the Expected Results, Acceptance Criteria & Operation Procedures	NCR Status (#, Class, Status)	Relevant EGS Test		Operation Procedures Status (% Complete)
			require immediate site shutdown and for other types of abnormal shutdown such as system critical equipment failure. Tik test also verifies that the ECS site can recover from an emergency shutdown.		OPS. PROC.:				
			SM - B080140.020\$E This test confirms the sites ability to restore files caused by an abnormal non-catastrophic shutdown using standard operational procedures and that the FSMS can continue to provide service in the event of a device failure.		SV/AT:  OPS. PROC.:				
			SM - B080150.010\$E  Demonstrate that M&O interfaces, provided for EDC ECS DAAC subsystems are accessible and functioning and that these interfaces are sufficient to support planned operations and maintenance activities.		SV/AT:  OPS. PROC.:				
			SM - B080150.020\$E  Demonstrate that interfaces between the ECS Subsystem Servers and their respective M&O Administrative terminal(s) support Maintenance of ECS Data bases (DB). Demonstrate that maintenance of ECS DBs do not require a "change" of display screens after modification of data base structures provided by ECS DB servers.  Demonstrate capabilities to interrupt maintenance session and restart the		SV/AT:  OPS. PROC.:				
			session without loss of information. Verify through Inspection that EDC LSM data base maintenance capabilities reflect cross site standards for maintenance of ECS Data bases.  E to E - B120110.020\$E The System Start-up test procedure ensures that the EDC ECS DAAC is able to prepare the system for a full day of		SV/AT:				

Scenario	OPS Rehearsals  Launch Critical Scenario (Task/Activity/Operation)	Functionality	Pre-Certification Tests (SV/AT Tests & ICT Tests)	Status of Pre- Certificati on Tests	Comments on the Expected Results, Acceptance Criteria & Operation Procedures	NCR Status (#, Class, Status)	EGS Relevant EGS Test	Test Data Status	Operation Procedures Status (% Complete)
			E to E - B120110.010\$E  The ECS DAAC, EOC and SMC  Communications test procedure verifies the capabilities of the ECS DAACs to sequentially send messages among themselves and to the SMC, and also to receive and process acknowledgments of proper message receipt. Each ECS  DAAC user/operator sequentially and then concurrently broadcasts data reques messages to each of the other three  DAACs and to the SMC. This test procedure also verifies the capability of the EOC to send sequential messages to each ECS DAAC. An EOC operator establishes communications with the four DAACs, sends a set of sequential messages to each, and confirms proper message receipts and acknowledgments. The interfaces between the DAACs and the EOC are also tested. Communication between EOC and SMC is verified  SM - B080160.020\$E  The purpose of the test is to confirm the site's	:	OPS. PROC.:  SV/AT:  OPS. PROC.:  SV/AT:				
			sm - B080170.010\$E  This test identifies and verifies various interface protocol standards available for communications between various elements of ECS.  SM - B080170.020\$E This test case verifies EDC ECS DAAC connectivity with ECS external systems using the File Transfer Protocol		OPS. PROC.:  SV/AT:  OPS. PROC.:  SV/AT:				

	OPS Rehearsals						EGS	Inform.	
Scenario	Launch Critical Scenario (Task/Activity/Operation)	Functionality	Pre-Certification Tests (SV/AT Tests & ICT Tests)	Status of Pre- Certificati on Tests	Comments on the Expected Results, Acceptance Criteria & Operation Procedures	NCR Status (#, Class, Status)	Relevant EGS Test		Operation Procedures Status (% Complete)
					OPS. PROC.:				
			SM - B080170.030\$E This test case verifies the capability for the EDC ECS DAAC to communicate with the		SV/AT:				
			GSFC, LaRC, NSIDC, SMC and EOC using representative data samples of the actual data types to be used during normal operations of the system as input,		OPS. PROC.:				
			SM - B080170.040\$E This test case verifies the capability for the EDC ECS DAAC to communicate with the GSFC, LaRC, NSIDC, SMC and EOC using Electronic Mail Services.		SV/AT:  OPS. PROC.:				
			SM - B080610.010\$E The Network Status Test confirms the ability		SV/AT:				
			of the LSM staff to obtain configuration management information and the status of network resources, including data flow status information. Services provided by ECS include collecting information describing the state of the network subsystem and its communications resources. This test also verifies the ability to perform management functions which exercise control over the network configuration, parameters, and resources These functions include access to and manipulation of network resources		OPS. PROC.:				
			SM - B080610.030\$E The		SV/AT:				
			purpose of this test is to verify the functionality of the Directory/Naming Service. The Directory/Naming Service uniquely associates a name with resources/principals, either physical or logical, along with some information so they can be identified and located by the name even if the named resource change its physical address over time	ş	OPS. PROC.:				

	OPS Rehearsals						EGS	Inform.	
Scenario	Launch Critical Scenario (Task/Activity/Operation)	Functionality	Pre-Certification Tests (SV/AT Tests & ICT Tests)	Status of Pre- Certificati on Tests	Comments on the Expected Results, Acceptance Criteria & Operation Procedures	NCR Status (#, Class, Status)	Relevant EGS Test	Test Data Status	Operation Procedures Status (% Complete)
			SM - B080610.040\$ This test confirms the ability of the ECS network to provide the Electronic Messaging and Bulletin Board Services to each ECS site. The Electronic Messaging Service provides the capability to manage electronic mail messages to its users and applications		SV/AT:  OPS. PROC.:				
			SM - B080620.010\$E This test verifies the fault management requirements for the disk archive and distribution subsystem of the ECS. Simulated faults are induced in the subsystem to verify fault detection, fault isolation and reporting Using simulated fault situations (such as non-compliance of on-demand or scheduled data request event) covering both the system-wide an site level faults, the resource managers discovers a fault while monitoring the system.	d	SV/AT:  OPS. PROC.:				
			SM - B080620.020\$E This test verifies the fault management requirements for the communications subsystem of the ECS. Simulated faults are induced in the subsystem to verify fault detection, fault isolation and reporting Using a simulated network fault (e.g. configuration errors, protocol errors, communications hardware errors, performance degradation conditions, and telecommunications errors and failures) as input for this test, the resource manager monitors the ECS network and receives a fault indication.		SV/AT:  OPS. PROC.:				
			SM - B080630.010\$E The objective of this test is to verify the LSM ability to control user access and prevention of data corruption resulting		SV/AT:				

### Attachment 1

	OPS Rehearsals						EGS	Inform.	
Scenario	Launch Critical Scenario (Task/Activity/Operation)	Functionality	Pre-Certification Tests (SV/AT Tests & ICT Tests)	Status of Pre- Certificati on Tests	Comments on the Expected Results, Acceptance Criteria & Operation Procedures	NCR Status (#, Class, Status)	Relevant EGS Test	Test Data Status	Operation Procedures Status (% Complete)
			from unauthorized access.		OPS. PROC.:				
			SM - B080630.020\$E The objective of this test is to verify the LSM security functions; such as maintaining, authenticating, and monitoring user and device accesses and privileges; performing security testing that includes, password auditing and site internal access/privileges checking; performing compromise detection (e.g. virus or worm penetration); and performing risk detection and analyses.		SV/AT:  OPS. PROC.:				
			SM - B080710.010\$E This test verifies LSM SA's ability to track and audit configuration accountability of ECS hardware and software.		SV/AT:  OPS. PROC.:				
			SM - B080710.020\$E This test verifies the LSM's ability to track ECS resource usage, update user account information, and dispose of accounting functions.		SV/AT:  OPS. PROC.:				
E-LC-12	ESDT Addition/Modification, and Search, and Distribution This scenario exercises: 1) the evaluation of proposed ESDTs using EDAAC ECS test mode; 2) the commission of new ESDTs into operations; 3) search of all ESDT data types in EDAAC ECS using the ECS Client; 4) order of a sample of each ESDT using the Client; 5) distribution of samples via pull ftp, push ftp, and 8 mm	1220 Show the system can support data type installations, including advertising and data dictionary export.  1230 Show Metadata Creation Tools work properly for metadata population and all appropriate metadata destinations are populated correctly.  1460 Show the system can	SV - TS0840.1  This test demonstrates the capability to view all data types andheir associated servicesin the Science Data Server Representations for data server data objects(Earth Science Data Types - ESDTs) are displayed Informationfrom the ESDT-specific descriptor file includes product specific, granule and collection level attribute valuesand services associated with that ESDT Descriptor files for several ESDTs are printed and compared with the information displayed via the GUI. This test assumes ESDTs have previously		SV/AT:  1) The evaluation of proposed ESDTs using EDAAC ECS test mode;  • Not covered by any SV/AT test  2) The commission of new ESDTs into operations;  • Not covered by any SV/AT test  3) Order of a sample of each ESDT using the Client;  • Not covered by any SV/AT test		E-ETE5 E-ETE9 E-ETE15 E-EGS5 E-EGS9 E-EGS15 E-EGS10		

	OPS Rehearsals						EGS	Inform.	
Scenario	Launch Critical Scenario (Task/Activity/Operation)	Functionality	Pre-Certification Tests (SV/AT Tests & ICT Tests)	Status of Pre- Certificati on Tests	Comments on the Expected Results, Acceptance Criteria & Operation Procedures	NCR Status (#, Class, Status)	Relevant EGS Test	Test Data Status	Operation Procedures Status (% Complete)
	tape; and 6) inspection of samples using Client and other HDF inspection tools.	monitor and manage electronic distribution (DDIST GUI).  1250 Show operator can create, modify and delete schema configuration information, attributes, valids, values, definitions.  1200 Show system can export Advertising information for replication to advertising servers  1210 Show system can distribute (export) data dictionary information for replication to data dictionary servers.  1240 Show the system can support operator access and management of the data dictionary.  380 Show the system can add new data types to be ingested.	SV - TS0840.2 This test demonstrates the ability of the data server to provide new data type information to the data base when a new data type is added to a running Science Data Server. New ESDTs are added via the Data Server GUI (DSSGUI) 'Data Types'		4) Inspection of samples using Client and other HDF inspection tools.  • Not covered by any SV/AT test  OPS. PROC.:  SV/AT:  OPS. PROC.:				
			screen. Information specified on the GUI include ESDT ShortName, Version						

Operation ta Procedures Status (% Complete)

Scenario	OPS Rehearsals  Launch Critical Scenario (Task/Activity/Operation)	Functionality	Pre-Certification Tests (SV/AT Tests & ICT Tests)	Status of Pre- Certificati on Tests	Comments on the Expected Results, Acceptance Criteria & Operation Procedures	NCR Status (#, Class, Status)	EGS Relevant EGS Test	Inform.  Test Data Status	Operation Procedures Status (% Complete)
			that is already in the database, specifying						
			DLL and descriptor files that can't be						
			found, specifying DLL and descriptor						
			files that are not in the correct formats,						
			specifying an incompatible Short Name						
			on the input screen (as compared with the						
			DLL and descriptor files), specifying a						
			version number that is not compatible						
			with that specified in the descriptor file,						
			and adding several ESDTs successively,						
			each time with a different external						
			subsystem not up and running. This test						
			will also demonstrate that several GUIs						
			can be brought up at one time and						
			updated, via the refresh button, with data						
			entered on another GUI.						
			This test includes adding a new ESDT,						
			verifying the correct information was						
			added in the appropriate places in the						
			data base, verifying the correct						
			information was sent to the appropriate						
			subsystems, creating a subscription to the						
			new data type, and inserting a granule of						
			the new data type into the archive via the						
			data server request driver. ESDTs used						
			in this test case reference the Release B						

### **Attachment 1**

Attachine	OPS Rehearsals						EGS	Inform.	
Scenario	Launch Critical Scenario (Task/Activity/Operation)	Functionality	Pre-Certification Tests (SV/AT Tests & ICT Tests)	Status of Pre- Certificati on Tests	Comments on the Expected Results, Acceptance Criteria & Operation Procedures	NCR Status (#, Class, Status)	Relevant EGS Test		Operation Procedures Status (% Complete)
			data model.  Subscriptions to be created include notification only, FtpPush, FtpPull, and 8mm actions, meaning when the appropriate data is received, either the user will be notified via e-mail, or an FtpPull/Push or 8mm acquire will be initiated as well as the e-mail notification. In addition, qualified subscriptions will be created, where not only receipt of data will trigger a subscription, but receipt of 'special' data will trigger the subscription. Special data can be data based on a given time, data with a given xarID, or data that satisfies a number of other ESDT attributes. All subscriptions are based or subscription/Advertising servers. More information will be added to this section after working in the RCC lab later this week, and the web updated next week (8/22). Three test ESDTs have been created and will be used during this test. If they already reside in the system, or if more ESDTs are needed, a script can be run that will purge information for a given ESDT, so the SDSRV has no knowledge of it, and the ESDT can then be re-added using the GUI. The test ESDTs are TESTO1, TESTO2, TESTO3, and the script is called 'cleanESDT'.						
E-LC-13	Mode Management for Operations, SSI&T, and Test. This scenario exercises: 1) the use of mode management to conduct simultaneous operations and test activities; and 2) the use of mode management to conduct	1490 Show the system supports automated installation into modes via ECS Assist.	SV - TC0113 Mode management allows the operational staff to perform testing while operational activities continue uninterrupted. Mode management enables the execution of		SV/AT: OPS. PROC.:		E-EGS10 E-EGS11		

### **Attachment 1**

	OPS Rehearsals						EGS	Inform.	
Scenario	Launch Critical Scenario (Task/Activity/Operation)	Functionality	Pre-Certification Tests (SV/AT Tests & ICT Tests)	Status of Pre- Certificati on Tests	Comments on the Expected Results, Acceptance Criteria & Operation Procedures	NCR Status (#, Class, Status)	Relevant EGS Test	Test Data Status	Operation Procedures Status (% Complete)
	simultaneous operations and SSI&T activities; and 3) the use of mode management to support ECS custom code upgrades without downtime.		multiple modes, such that each mode functions without interfering with the other modes and each mode maintains integrity throughout it's execution such as, testing a data server application within the same system that is supporting the operational activities. The test copy of the data server must not interfere/interact with the operational copy of the data server on both data and process levels. In addition, it will only see and have access to interface components that have been specifically setup and initiated under the test mode. Operational process can never read from read from test data sets and test data can never be written to production data sets.						
			SV - TS0700.1 This test demonstrates the ability to establish a network connection between an External Data Provider and an ECS DAAC for ingest of a series of data collections, including collections containing single and multiple granules of data. The External Data Provider establishes a connection to the Gateway at the		SV/AT: OPS. PROC.:				

	OPS Rehearsals						EGS	Inform.	
Scenario	Launch Critical Scenario (Task/Activity/Operation)	Functionality	Pre-Certification Tests (SV/AT Tests & ICT Tests)	Status of Pre- Certificati on Tests	Comments on the Expected Results, Acceptance Criteria & Operation Procedures	NCR Status (#, Class, Status)	Relevant EGS Test	Test Data Status	Operation Procedures Status (% Complete)
			DAAC and sends an						
			Authentication Request. After						
			receiving the Authentication						
			Response, Data Availability						
			Notices (DANs) are sent to initiate						
			the ingest of data. The DANs are						
			received and validated and DAAs						
			are sent to the External Data						
			Provider. Upon validation, the data						
			is retrieved from the External Data						
			Provider via ftp and placed in a						
			pre-allocated Working Storage						
			location. Core metadata is then						
			extracted and the data is converted						
			to and ECS acceptable format if						
			necessary. The Science Data Server						
			(SDSRV) UR for the particular						
			data type being ingested is retrieved						
			from memory and an insert request						
			is submitted to the SDSRV for data						
			archiving. The insert request is						
			accepted and validated by the						
			SDSRV. The core metadata is						
			validated and the data is placed						
			into the archive location that has						
			been allocated. The Inventory						
			database is then updated with the						

	OPS Rehearsals						EGS	Inform.	
Scenario	Launch Critical Scenario (Task/Activity/Operation)	Functionality	Pre-Certification Tests (SV/AT Tests & ICT Tests)	Status of Pre- Certificati on Tests	Comments on the Expected Results, Acceptance Criteria & Operation Procedures	NCR Status (#, Class, Status)	Relevant EGS Test		Operation Procedures Status (% Complete)
			core metadata and a Data Delivery						
			Notice is sent to the External Data						
			Provider. The External Data						
			Provider responds by sending a						
			Data Delivery Acknowledgment						
			(DDA) to the DAAC. The Ingest						
			database is updated during the						
			ingest process to reflect the status						
			of the Ingest Requests. This						
			information can be viewed using						
			either the Monitor/Control function						
			(real-time) or History Log (post-						
			real-time) functions of the Ingest						
			GUI. Ingest events will be recorded						
			in the MSS Event Log.						
					CV/AT.				
			SV - TS0700.2 This test		SV/AT:				
			demonstrates the ability to recognize and						
			respond to error conditions encountered						
			during ingest of data via the Auto		OPS. PROC.:				
			Network Interface protocol Error testing						
			performed include the following:						
			invalid authentication request						
			• valid authentication request						

Scenario	OPS Rehearsals  Launch Critical Scenario (Task/Activity/Operation)	Functionality	Pre-Certification Tests (SV/AT Tests & ICT Tests)	Status of Pre- Certificati on Tests	Comments on the Expected Results, Acceptance Criteria & Operation Procedures	NCR Status (#, Class, Status)	EGS Relevant EGS Test	Inform.  Test Data Status	Operation Procedures Status (% Complete)
			<ul> <li>file transfer failure</li> <li>file size discrepancies</li> <li>invalid data type</li> <li>missing required metadata</li> <li>metadata parameters out of range</li> <li>failure to archive data</li> <li>missing required request information</li> <li>unauthorized ingest request submitter</li> <li>metadata syntax error</li> <li>invalid month, day, hour, minute, second in date/time value in metadata</li> <li>invalid year in date/time value in metadata</li> <li>successful archive</li> <li>The Ingest subsystem returns status to the external data provider.</li> </ul>						

	OPS Rehearsals						EGS	Inform.	
Scenario	Launch Critical Scenario (Task/Activity/Operation)	Functionality	Pre-Certification Tests (SV/AT Tests & ICT Tests)	Status of Pre- Certificati on Tests	Comments on the Expected Results, Acceptance Criteria & Operation Procedures	NCR Status (#, Class, Status)	Relevant EGS Test		Operation Procedures Status (% Complete)
			All errors are recorded in the MSS Event Log.						
			SV - TS0460 This test cases verifies		SV/AT:				
			that the Algorithm Integration and Test Tool (AITTL) provides the capabilities to subscribe to a Delivery Archive		OPS. PROC.:				
			Package (DAP), receive a DAP from the Data Server, and request a DAP to be						
			transferred from the Data Server to the SSI&T environment.						
			This test also verifies that the AITTL						
			provides the operations staff, via a GUI, the capability to display a list of the Science Software Archive Packages						
			(SSAPs) stored in the Science Data Server, and a list of the files for any						
			specific SSAP in the Data Server. The AITTL will also provides the operations						
			staff, via a GUI, the capability to display						
			and edit the metadata for a specific SSAP. The operations staff will have the						
			capability to store an SSAP to the Data Server.						
			This test also verifies that the operations staff can restrict update access to the						

### **Attachment 1**

	OPS Rehearsals						EGS	Inform.	
Scenario	Launch Critical Scenario (Task/Activity/Operation)	Functionality	Pre-Certification Tests (SV/AT Tests & ICT Tests)	Status of Pre- Certificati on Tests	Comments on the Expected Results, Acceptance Criteria & Operation Procedures	NCR Status (#, Class, Status)	Relevant EGS Test	Test Data Status	Operation Procedures Status (% Complete)
			Data Server. The operations staff, via a						
			GUI, can add and delete SSAPs to/from						
			the Data Server; and add, delete, or						
			extract a copy of a file from the set of						
			files comprising an SSAP. It will be						
			possible to add an SSAP to the Data						
			Server by manually issuing the						
			commands or by using a script file which	ı					
			contains the input commands. The						
			operations staff will have the capability						
			to maintain additions and deletions of the	:					
			SSAPs. This will be done by						
			maintaining an update record in each						
			SSAP. A record will be made of all the						
			updates made						
			SV - TS0445 This test verifies the		SV/AT:				
			capability of PDPS to execute in both						
			operational and test mode simultaneously		OPS. PROC.:				
			and maintain data integrity. Each						
			application must register within their						
			mode-associated namespace prior to						
			execution. A mode identifier must be						
			incorporated for CSS name service						
			lookups for the application to run in test						
			mode. PDPS will be running in						
			operational mode. A test mode will be						
			brought up utilizing the same machines						

### **Attachment 1**

	OPS Rehearsals						EGS	Inform.	
Scenario	Launch Critical Scenario (Task/Activity/Operation)	Functionality	Pre-Certification Tests (SV/AT Tests & ICT Tests)	Status of Pre- Certificati on Tests	Comments on the Expected Results, Acceptance Criteria & Operation Procedures	NCR Status (#, Class, Status)	Relevant EGS Test	Test Data Status	Operation Procedures Status (% Complete)
			for the same functions, and then with different machines. This test mode will be run utilizing Algorithm Integration and Test activities.						
			This test will not use any interfaces outside of PDPS.						
			SM - B080810.010\$E Ensure		SV/AT:				
			that mode management facilitate execution of modes and maintains logica	1	OPS. PROC.:				
			and operational separation between non- production (test or training) modes and						
			the site production mode. Assure that						
			mode management capabilities allow staff to observe run-time state conditions						
			along with the mode status. Ensure that the test and run time conditions caused						
			by a mode are compatible with the site's						
			production environment and introduces no adverse impacts to planed activities						
			for the site.  E to E - B120110.050\$E The		SV/AT:				
			End-to-End Fault Management test						
			procedure initializes the capabilities of each ECS element to support end-to-end		OPS. PROC.:				
			system testing and fault isolation, as well						
			as the capability to monitor the						

### **Attachment 1**

	OPS Rehearsals						EGS	Inform.	
Scenario	Launch Critical Scenario (Task/Activity/Operation)	Functionality	Pre-Certification Tests (SV/AT Tests & ICT Tests)	Status of Pre- Certificati on Tests	Comments on the Expected Results, Acceptance Criteria & Operation Procedures	NCR Status (#, Class, Status)	Relevant EGS Test	Test Data Status	Operation Procedures Status (% Complete)
E-LC-14	Distribution of ETM+ LOR and ASTER L1a/1b to ITs. This scenario exercises capability of EDAAC ECS to distribute data via FTP and 8mm tapes.	and archived so that they can be located and retrieved for production and distribution.  1450 Show the system can support scheduling and management of physical media devices used by ingest and data distribution.  1660 Show JEST can support authenticated user access and guest user access. (Drop 5)  1680 Show JEST can support access to data dictionary for valids. (Drop 5)  1690 Show the JEST (web) client can support user inventory search to single and multiple sites with core and product specific attributes;	performance of each ECS element during testing. The Management Subsystem (MSS) Fault Management Application Service will be demonstrated as the primary fault detection capability.  SV - TS0890.8 This test demonstrates the ability for users to perform the following functions:  • Users ability create data requests for data products.  • Users ability to view the data requests recorded in the user session log.  • Users ability to retrieve any previously saved data requests parameters into a new data request, edit the parameters, save the modified parameters, and/or submit the new data requests.		SV/AT: Steps 20 and 32 state, "Verify that the data is okay." However, no criteria are provided for determining whether the data files are "okay."  OPS. PROC.:		E-ETE5 E-ETE9 E-ETE15 E-EGS15 E-EGS9 E-EGS10 E-EGS11		
		cancellation of inventory and browse search requests. (Drop 5)  1740 Show the JEST client	The B0SOT will be used for this test.  Search Results will be compared to the manual search of the database. Data will be pushed, pulled, placed on media						

### **Attachment 1**

Attachme	OPS Rehearsals						EGS	Inform.	
Scenario	Launch Critical Scenario (Task/Activity/Operation)	Functionality	Pre-Certification Tests (SV/AT Tests & ICT Tests)	Status of Pre- Certificati on Tests	Comments on the Expected Results, Acceptance Criteria & Operation Procedures	NCR Status (#, Class, Status)	Relevant EGS Test	Test Data Status	Operation Procedures Status (% Complete)
		can support product ordering (including ASTER on demand) from single and multiple sites for media and FTP delivery. (Drop 5)	(according to BOSOT capabilities) and in some cases compare to the user's workstation to justify that the data is okay.  Error conditions include Data Requests for data that is not in the user's data collection requests for non-existent data types and non -available media types.  SV - TS0890.8 This test demonstrates the ability for users to perform the following functions:  • Users ability create data requests for data products.  • Users ability to view the data requests recorded in the user session log.  • Users ability to retrieve any previously saved data requests parameters into a new data request, edit the parameters, save the modified parameters, and/or submit the new data requests.		SV/AT:  OPS. PROC.:				

Scenario   Launch Critical Scenario   (SVAT Tests & ICT Tests)   Pre-Certification Tests   (SVAT Tests & ICT Tests)   Pre-Certification Tests   Procedures   Pr		OPS Rehearsals						EGS	Inform.	
Search Results will be compared to the manual search of the database. Data will be pushed, pulled, placed on media (according to BoSOT capabilities) and in some cases compare to the user's workstation to justify that the data is okay.  Error conditions include Dam Requests for data that is not in the user's data collection requests for non-existent data types and non-available media types.  E to E - B120330.050\$E The ASTER DAR Product Distribution test case verifies that BED DAAC distributes the ASTOP product and associated metadata to the customers specified in the DAR. The imputs to this test case include the ASTOP product	Scenario		Functionality		Pre- Certificati	Expected Results, Acceptance Criteria & Operation	Status (#, Class,	EGS	<b>Test Data</b>	Procedures Status
servers are necessary. Steps 210, 380, 540, and 700 state, "Copy files to home directory for verification," but nowhere thereafter is it verified that the data files received actually				Search Results will be compared to the manual search of the database. Data will be pushed, pulled, placed on media (according to BOSOT capabilities) and in some cases compare to the user's workstation to justify that the data is okay.  Error conditions include Data Requests for data that is not in the user's data collection requests for non-existent data types and non -available media types.  E to E - B120330.050\$E The ASTER DAR Product Distribution test case verifies that the EDC DAAC distributes the AST09 product and associated metadata to the customers specified in the DAR. The inputs to this test case include the AST09 product		B120330.050\$E Step 70 states, "Verify necessary servers are up and running," but it does not say which servers are necessary. Steps 210, 380, 540, and 700 state, "Copy files to home directory for verification," but nowhere thereafter is it verified that the data				

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Scenario	OPS Rehearsals  Launch Critical Scenario (Task/Activity/Operation)	Functionality	Pre-Certification Tests (SV/AT Tests & ICT Tests)	Status of Pre- Certificati on Tests	Comments on the Expected Results, Acceptance Criteria & Operation Procedures	NCR Status (#, Class, Status)	Relevant EGS Test	Test Data Status	Operation Procedures Status (% Complete)
			B100250.020\$E		data. There is no verification that the D3 tape produced in steps 740-800 is actually readable and contains the correct data.  OPS. PROC.:  SV/AT: ASTER Completed 4/1/98 MODIS Completed 4/1/98 FDC Bred and OA				
E-LC-15	Server failure recovery This scenario exercises 1) EDAAC ECS system work around and recovery from server failures; 2) delivery, ingest, and archive of data after an extended down time of an ECS server; and 3) processing of data in a catch up environment.	1510 Show that the system can demonstrate fault recovery (client/server rebinding after failure, resource cleanup, cold restart).  1540 Show that the system can recover queued and in progress subscription notifications and actions after failures in SBSRV and SDSRV.  1530 – Show that the system can recover queued and in progress orders after failures in DDIST, SDSRV, and STMGT.	E to E - B120110.050\$E  The End-to-End Fault Management test procedure initializes the capabilities of each ECS element to support end-to-end system testing and fault isolation, as well as the capability to monitor the performance of each ECS element during testing. The Management Subsystem (MSS) Fault Management Application Service will be demonstrated as the primary fault detection capability.		EDC Product QA completed 4/1/98  SV/AT: There is no testing of the system to recover from extended downtime by ingesting and archiving of data. There is also no testing of the system using a catch up mode.  OPS. PROC.:		E-EGS10		

	OPS Rehearsals						EGS	Inform.	
Scenario	Launch Critical Scenario (Task/Activity/Operation)	Functionality	Pre-Certification Tests (SV/AT Tests & ICT Tests)	Status of Pre- Certificati on Tests	Comments on the Expected Results, Acceptance Criteria & Operation Procedures	NCR Status (#, Class, Status)	Relevant EGS Test		Operation Procedures Status (% Complete)
F1016		1550 Show that the system can recover queued and in progress requests after failures in INS, SDSRV, and STMGT.			CYVAR		P. P.C.C.		
E-LC-16	Core Infrastructure and Systems Management This scenario exercises: 1) use of monitoring resource tools (HP Openview and Tivolli), 2) using system problem reporting tools; 3) use of trouble reporting tools (Remedy); 4) use of configuration management tools (DDTS); 5) use of resource planning tools; and 6) web/mail server interface.	1380 Show the system can support trouble ticketing. 1390 Show the system can support NCR management. 1360Show the system can use HP Openview and Tivoli to perform network monitoring, application monitoring, COTS monitoring and O/S Monitoring, including error detection with threshold checking. 820 Show the capability to generate plans that contain ground event jobs. 1400 Show the system can support baseline and inventory management. 1430 Show the ability to produce and browse MSS error logs. 1470 Show that the operator can monitor and manage the DCE infrastructure.	SM - B080110.010\$E  This test verifies the existence and accessibility of documented operational and maintenance policies and procedures		SV/AT:  Use of HP Openview is covered well in the tests. Only test related to Tivoli is to bring the Tivoli server up and bring it down 1. Only problem reporting tool covered in the test is Remedy. 2. Access and use of Remedy is covered in the tests. 3. Access to ClearCase, DDTS and XRP II is covered in the tests. 4. Test of Resource Planning tools not covered in the tests. Web and e-mail interface is covered in the tests.		E-EGS7 E-EGS10 E-EGS11		

Scenario	OPS Rehearsals  Launch Critical Scenario (Task/Activity/Operation)	Functionality	Pre-Certification Tests (SV/AT Tests & ICT Tests)	Status of Pre- Certificati on Tests	Comments on the Expected Results, Acceptance Criteria & Operation Procedures	NCR Status (#, Class, Status)	EGS Relevant EGS Test	Inform.  Test Data Status	Operation Procedures Status (% Complete)
					OPS. PROC.:				
			SM - B080110.020\$E This test verifies that the ECS hardware and		SV/AT:				
			software configuration items are on the system.		OPS. PROC.:				
			SM - B080120.010\$E The purpose of this test is to demonstrate a normal startup, operations and hutdown of the ECS site. This testalso demonstrates the ability of the ECS to		SV/AT: OPS. PROC.:				
			perform a warm restart and demonstrates that configuration inputs from the prior operational state are still active following a shutdownand restart process.						
			SM - B080130.020\$E This test verifies the ability of the LSM to start up and shut down managed applications. Application event recording and alert generation are also verified, along with the capability to monitor the status of managed applications.		SV/AT: OPS. PROC.:				
			SM - B080140.010\$E This confirms that the site's standard procedures contain methodology for responding to catastrophic situations that require immediate site shutdown and for other types of abnormal shutdown such as system critical equipment failure. Tik		SV/AT: OPS. PROC.:				
			test also verifies that the ECS site can recover from an emergency shutdown						
			SM - B080140.020\$E This test confirms the sites ability to restore files caused by an abnormal non-catastrophic shutdown using standard operational procedures and that the FSMS can continue to provide service in the event		SV/AT: OPS. PROC.:				

	OPS Rehearsals						EGS	Inform.	
Scenario	Launch Critical Scenario (Task/Activity/Operation)	Functionality	Pre-Certification Tests (SV/AT Tests & ICT Tests)	Status of Pre- Certificati on Tests	Comments on the Expected Results, Acceptance Criteria & Operation Procedures	NCR Status (#, Class, Status)	Relevant EGS Test		Operation Procedures Status (% Complete)
			of a device failure.						
			SM - B080150.010\$E  Demonstrate that M&O interfaces, provided for EDC ECS DAAC subsystems are accessible and functioning and that these interfaces are sufficient to support planned operations and maintenance activities.		SV/AT: OPS. PROC.:				
			SM - B080150.020\$E		SV/AT:				
			Demonstrate that interfaces between the ECS Subsystem Servers and their respective M&O Administrative terminal(s) support Maintenance of ECS Data bases (DB). Demonstrate that maintenance of ECS DBs do not require a "change" of display screens after modification of data base structures provided by ECS DB servers.  Demonstrate capabilities to interrupt		OPS. PROC.:				
			maintenance session and restart the session without loss of information. Verify through Inspection that EDC LSM data base maintenance capabilities reflect cross site standards for maintenance of ECS Data bases.						
			SM - B080160.020\$E The purpose of the test is to confirm the site's capability to store, archive, and backup data.		SV/AT: OPS. PROC.:				
			SM - B080170.020\$E This test case verifies EDC ECS DAAC connectivity with ECS external systems		SV/AT:				
			using the File Transfer Protocol		OPS. PROC.:				
			SM - B080170.030\$E This test case verifies the capability for the EDC		SV/AT:				
			ECS DAAC to communicate with the GSFC, LaRC, NSIDC, SMC and EOC using representative data samples of the		OPS. PROC.:				

	OPS Rehearsals						EGS	Inform.	
Scenario	Launch Critical Scenario (Task/Activity/Operation)	Functionality	Pre-Certification Tests (SV/AT Tests & ICT Tests)	Status of Pre- Certificati on Tests	Comments on the Expected Results, Acceptance Criteria & Operation Procedures	NCR Status (#, Class, Status)	Relevant EGS Test		Operation Procedures Status (% Complete)
			actual data types to be used during						
			normal operations of the system as input.  SM - B080170.040\$E This test		SV/AT:				
			case verifies the capability for the EDC ECS DAAC to communicate with the GSFC, LaRC, NSIDC, SMC and EOC		OPS. PROC.:				
			using Electronic Mail Servéces.						
			SM - B080610.010\$E The Network Status Test confirms the ability		SV/AT:				
			of the LSM staff to obtain configuration management information and the status of network resources, including data flow	7	OPS. PROC.:				
			status information. Services provided by ECS include collecting information describing the state of the network						
			subsystem and its communications resources. This test also verifies the ability to perform management functions which exercise control over the network						
			configuration, parameters, and resources These functions include access to and manipulation of network resources						
			SM - B080610.030\$E The		SV/AT:				
			purpose of this test is to verify the functionality of the Directory/Naming Service. The Directory/Naming Service		OPS. PROC.:				
			uniquely associates a name with resources/principals, either physical or logical, along with some information so						
			they can be identified and located by the name even if the named resource change its physical address over time	S					
			SM - B080610.040\$ This test		SV/AT:				
			confirms the ability of the ECS network to provide the Electronic Messaging and Bulletin Board Services to each ECS site		OPS. PROC.:				
			The Electronic Messaging Service provides the capability to manage electronic mail messages to its users and applications.						

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Scenario	OPS Rehearsals  Launch Critical Scenario (Task/Activity/Operation)	Functionality	Pre-Certification Tests (SV/AT Tests & ICT Tests)	Status of Pre- Certificati on Tests	Comments on the Expected Results, Acceptance Criteria & Operation Procedures	NCR Status (#, Class, Status)	Relevant EGS Test	Test Data Status	Operation Procedures Status (% Complete)
			sm - B080620.010\$E This test verifies the fault management requirements for the disk archive and distribution subsystem of the ECS. Simulated faults are induced in the subsystem to verify fault detection, fault isolation and reporting Using simulated fault situations (such as non-compliance of on-demand or scheduled data request event) covering both the system-wide an site level faults, the resource managers discovers a fault while monitoring the system.  SM - B080620.020\$E This test verifies the fault management requirements for the communications subsystem of the ECS. Simulated faults are induced in the subsystem to verify fault detection, fault isolation and reporting Using a simulated network fault (e.g. configuration errors, protocol errors, communications hardware errors, performance degradation conditions, and telecommunications errors and failures) as input for this test, the resource manager monitors the ECS network and receives a fault indication.  SM - B080630.010\$E The objective of this test is to verify the LSM ability to control user access and	I	SV/AT:  OPS. PROC.:  SV/AT:  OPS. PROC.:				
			prevention of data corruption resulting from unauthorized access.		OPS. PROC.:				
			SM - B080630.020\$E The objective of this test is to verify the LSM security functions; such as maintaining, authenticating, and monitoring user and device accesses and privileges; performing security testing that includes, password auditing and site internal		SV/AT: OPS. PROC.:				

Attachine	OPS Rehearsals						EGS	Inform.	
Scenario	Launch Critical Scenario (Task/Activity/Operation)	Functionality	Pre-Certification Tests (SV/AT Tests & ICT Tests)	Status of Pre- Certificati on Tests	Comments on the Expected Results, Acceptance Criteria & Operation Procedures	NCR Status (#, Class, Status)	Relevant EGS Test		Operation Procedures Status (% Complete)
E-LE-9 E-LE-12	ASTER Routine processing and Manual ASTER Ad Hoc Processing and Archive This scenario exercises: 1) planning and processing of the ASTER L1a/1b data, including the retrieval and staging of ancillary data from the Data Server; 2) receipt of user services for a request of higher level ASTER products, 3) production scheduling, 4) request processing, 5) archiving the results, 6)distribution of the data, and 7) order tracking capability.		access/privileges checking; performing compromise detection (e.g. virus or worm penetration); and performing risk detection and analyses.  SM - B080710.010\$E This test verifies LSM SA's ability to track and audit configuration accountability of ECS hardware and software.  SM - B080710.020\$E This test verifies the LSM's ability to track ECS resource usage, update user account information, and dispose of accounting functions.  B090420.020\$E		SV/AT: OPS. PROC.: SV/AT: OPS. PROC.:				

	OPS Rehearsals						EGS	Inform.	
Scenario	Launch Critical Scenario (Task/Activity/Operation)	Functionality	Pre-Certification Tests (SV/AT Tests & ICT Tests)	Status of Pre- Certificati on Tests	Comments on the Expected Results, Acceptance Criteria & Operation Procedures	NCR Status (#, Class, Status)	Relevant EGS Test	Test Data Status	Operation Procedures Status (% Complete)
			B090420.050\$E						
			B100250.010\$E						
			B100250.020\$E						
			B090490.010\$E						
			B120330.010\$E						
E-LE-1	Full Daily Ingest of ASTER L1a/1b via D3 Tape: This scenario exercises full volume ingest of ASTER L1a and L1b products		B090430.010\$E						
L-LE-2	Full Daily Ingest of MODIS L2g via EBnet from GDAAC: This scenario exercises full volume ingest of MODIS L2g products.								